EROSION & SEDIMENT CONTROL/SWPPP NOTES

DEWATERING NOTES

1. THE DESIGN, ADEQUACY AND OPERATION OF ANY AND ALL DEWATERING ACTIVITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

2. THE CONTRACTOR SHALL PROTECT ALL ADJACENT PROPERTIES, RIGHTS OF WAYS, NATURAL AREAS AND EXISTING UTILITY SYSTEMS FROM EROSION AND SEDIMENTATION ASSOCIATED WITH DEWATERING ACTIVITIES.

3. DEWATERING DISCHARGES SHALL ALWAYS BE DIRECTED THROUGH SUITABLE BEST MANAGEMENT PRACTICE (BMP) SUCH AS A TEMPORARY SEDIMENT TRAPPING DEWATERING BAG.

STANDARD NOTES

1. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND FOURTEEN DAYS (14) AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

   A. WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
   B. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.

2. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED EVERY SEVEN (7) DAYS AND AFTER EVERY RAIN EVENT. IF SITE INSPECTIONS IDENTIFY BMP'S THAT ARE DAMAGED OR ARE NOT OPERATING EFFECTIVELY, MAINTENANCE MUST BE PERFORMED AS SOON AS PRACTICAL OR AS REASONABLY POSSIBLE AND BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE.

3. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE ANY SEDIMENTS BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.

4. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.

5. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.

6. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT LADEN WATER TO APPROPRIATE STABLE OUTLETS.

7. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.

PERMANENT STORMWATER MANAGEMENT STRUCTURE MAINTENANCE PLAN

1. PRIOR TO FINAL ACCEPTANCE, MAINTENANCE OF ALL PERMANENT STORMWATER MANAGEMENT STRUCTURES IS THE RESPONSIBILITY OF THE CONTRACTOR.

2. EXCEPT AS OTHERWISE CONTRACTED OR AS SPECIFIED FOR WARRANTY, MAINTENANCE OF ALL PERMANENT STORMWATER MANAGEMENT STRUCTURES AFTER FINAL ACCEPTANCE IS THE RESPONSIBILITY OF THE OWNER.

3. IN ADDITION TO MAINTENANCE REQUIRED DURING CONSTRUCTION AS INDICATED AND SPECIFIED ELSEWHERE, PERMANENT STORMWATER MANAGEMENT STRUCTURE MAINTENANCE SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS SO AS TO PREVENT EROSION BY WIND OR PRECIPITATION:

   A. VEGETATED AREAS (TURF/PLANTING BEDS/PLANTS/TREES/SHRUBBERY)

      I. ALL VEGETATED AREAS SHALL BE PROPERLY MAINTAINED BY MOWING, PRUNING, WATERING, FERTILIZING AND AS OTHERWISE REQUIRED TO MAINTAIN A FULL AND HEALTHY VEGETATION.
      II. ALL PLANTING BEDS WITH MULCH SHALL BE PROPERLY MAINTAINED BY THE REPLACEMENT OF MULCH AS OTHERWISE REQUIRED TO MAINTAIN COMPLETE COVERAGE OF THE BED(S).
      III. AREAS OF PLANTS THAT DIE OR SUBSIDE SHALL BE REPLACED AS NEEDED.
      IV. VEGETATED AREAS SHALL BE REGULARLY CLEANED OF LITTER, DEBRIS AND OTHER REFUSE THAT MAY POLLUTE SURROUNDING PONDS, INFRASTRUCTURE OR NATURAL AREAS.
      V. INSPECTION AND CLEANING INTERVALS SHALL MATCH MOWING INTERVALS BUT SHALL NOT EXCEED ONCE PER MONTH.

   B. PAVEMENTS/IMPERVIOUS SURFACES

      I. ALL PAVEMENT DISTRESSES SUCH AS POTHOLES, CRACKING OR OTHER FAILURE SHALL BE PATCHED TO PREVENT EROSION OF UNDERLYING SOILS.
      II. EXCESSIVE PETROLEUM PRODUCE BUILDUP OR OTHER CHEMICAL BUILDUP OR SPILL SHALL BE CLEANED TO PREVENT MIGRATION TO SURROUND WATER BODIES OR STORM DRAINAGE SYSTEMS.
      III. PAVED AREAS SHALL BE REGULARLY CLEANED OF LITTER, DEBRIS AND OTHER REFUSE THAT MAY POLLUTE SURROUND PONDS, INFRASTRUCTURE OR NATURAL AREAS.
      IV. INSPECTION AND CLEANING INTERVALS SHALL MATCH MOWING INTERVALS BUT SHALL NOT EXCEED ONCE PER MONTH.

   C. STORM DRAINAGE STRUCTURES & PIPING

      I. ALL STORM DRAINAGE STRUCTURES (CATCH BASINS, CURB INLETS, MANHOLES, FLUMES, JUNCTION BOXES, ETC..) AND PIPING SHALL BE VISUALLY INSPECTED REGULARLY CLEANED OF LITTER, DEBRIS, SEDIMENT AND OTHER REFUSE THAT MAY POLLUTE SURROUND PONDS, INFRASTRUCTURE OR NATURAL AREAS.
      II. EXCESSIVE BUILDUP OF SEDIMENT OR NOTICEABLE DECREASE IN FLOW MAY INDICATE A BLOCKAGE OR PIPE FAILURE. IN THIS CASE, INSPECT FULL LENGTHS OF PIPE RUNS FOR FAILURE OR BLOCKAGE AND CLEAN OR REPAIR ACCORDINGLY.
      III. INSPECTION AND CLEANING INTERVALS SHALL NOT EXCEED ONCE PER YEAR.

   D. SLOPES

      I. SLOPES OR BANKS SHALL BE INSPECTED, MAINTAINED AND REPAIRED AS NOTED FOR THE SURFACE TYPE NOTED ABOVE.

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT & NATURAL RESOURCES LAND QUALITY SECTION

EROSION & SEDIMENTATION CONTROL PLAN APPLICATION CHECKLIST

The following items shall be incorporated with respect to specific site conditions, in an erosion & sediment control plan:

LOCATION INFORMATION

- X Project location (roads, streets, landmarks)
- X North arrow and scale

GENERAL SITE FEATURES (Plan elements)

- X Legend: North arrow, scale, etc.
- NA Property lines
- X Existing contours (topographic lines)
- X Proposed contours
- X Limits of disturbed area (provide acreage total, delineate limits, and label)
- X Planned and existing building locations and elevations
- X Planned & existing road locations & elevations
- NA Lot and/or building numbers
- NA Geologic features: rock outcrops, seeps, springs, wetland and their limits, streams, lakes, ponds, dams, etc.
- NA Easements and drainageways
- NA Profiles of streets, utilities, ditchlines, etc.
- NA Stockpiled topsoil or subsoil locations
- X If the same person conducts the land-disturbing activity & any related borrow or waste activity, the related borrow or waste activity shall constitute part of the land-disturbing activity unless the borrow or waste activity is regulated under the Mining Act of 1971, or is a landfill regulated by the Division of Solid Waste Management. If the land-disturbing activity and any related borrow or waste activity are not conducted by the same person, they shall be considered separate land-disturbing activities and must be permitted either thru the Sedimentation Pollution Control Act as a **one-use borrow site** or through the Mining Act.
- NA Stream disturbance over 150 linear feet may require 401 Water Quality certification via the Division of Water Quality

EROSION CONTROL MEASURES (on plan)

- X Legend
- X Location of temporary measures
- X Location of permanent measures
- X Construction drawings and details for temporary and permanent measures
- X Maintenance requirements of measures
- X Contact person responsible for maintenance

SITE DRAINAGE FEATURES

- X Existing and planned drainage patterns (include off-site areas that drain through project)
- X Method of determination of and calculations for Acreage of land being disturbed
- X Size and location of culverts and sewers
- X Soil information: type, special characteristics
- X Soil information below culvert storm outlets
- NA Name and classification of receiving water course or name of municipal operator (only where stormwater discharges are to occur)

Updated 8/04

STORMWATER CALCULATIONS

- X Pre-construction runoff calculations for each outlet from the site (at peak discharge points)
- X Design calculations for peak discharges of runoff (including the construction phase & the final runoff coefficients of the site)
- X Design calcs of culverts and storm sewers
- X Discharge and velocity calculations for open channel and ditch flows (easement & right-of-ways)
- NA Design calcs of cross sections and method of stabilization of existing and planned channels (include temporary linings)
- NA Design calcs and construction details of energy dissipators below culvert and storm sewer outlets (diameters & apron dimensions)
- NA Design calcs and dimension of sediment basins
- NA Surface area and settling efficiency information for proposed sediment traps and/or basins

VEGETATIVE STABILIZATION

- X Area & acreage to be vegetatively stabilized
- X Method of soil preparation
- X Seed type & rates (temporary & permanent)
- X Fertilizer type and rates
- X Mulch type and rates

NOTE: Plan should include provisions for groundcover on exposed slopes within 15 working days or 30 calendar days (whichever is shorter), following completion of any phase of grading; permanent groundcover for all construction or development.

FINANCIAL RESPONSIBILITY/OWNERSHIP FORM

- X Completed, signed & notarized FR/O Form
- X Accurate application fee ($50.00 per acre rounded up the next acre with no ceiling amount)
- X Certificate of assumed name, if the owner is a partnership
- X Name of Registered Agent (if applicable)
- NA Copy of the most current Deed for the site

NOTE: For the Express Permitting Option, inquire at the local Regional Office for availability.

SEDIMENT AND EROSION CONTROL SHALL BE STRICTLY ENFORCED

NARRATIVE AND CONSTRUCTION SEQUENCE

- X Narrative describing the nature & purpose of the construction activity
- X Construction sequence related to erosion and sediment control (including installation of critical measures prior to the initiation of the land-disturbing activity & removal of measures after areas they serve are permanently stabilized)
- **X Bid specifications related only to erosion control**

NORTH CAROLINA PROFESSIONAL SEAL 027779 ENGINEER LAWRENCE K. BARTHELEMY, IV

US ARMY CORPS OF ENGINEERS SAVANNAH

BY	DATE	DESCRIPTION	SYMBOL

DESIGNED BY: JDC
DWN BY: LKB JDC
SUBMITTED BY: LKB
FILE NAME: BRHC4510.DWG
DATE: 25 JAN 2010
SOLICITATION NO.: W912HN-09-R-0018
CONTRACT NO.:
CATEGORY CODE: 730-46-01
SIZE: 24x22
PLOT SCALE: NOT TO SCALE
PLOT DATE:

U. S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH DISTRICT

LS3P ASSOCIATES LTD. 2054 KING STREET CHARLESTON, SC, 29401

ALBRITTON JUNIOR HIGH SCHOOL ADDITION FT BRAGG NORTH CAROLINA

SWPPP/ EROSION CONTROL NOTES

PLATE REFERENCE NUMBER C-721
SHEET 26